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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,154	07/31/2003	Matthew Krokosz	449/118	2229

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EXAMINER
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PANNALA, SATHYANARAYA R

ART UNIT	PAPER NUMBER
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2164

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/631,154

Applicant(s)

KROKOSZ, MATTHEW

Examiner

Sathyanarayan Pannala

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's Amendment filed on 11/3/2006 has been entered with amended claims 1-15. In this Office Action, claims 1-26 are pending.

#### ***Claim Objections***

2. Claims 4 and 14 status objected to because of the following informalities: The status of claims should have been changed to "Currently amended" instead of "original". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the relation between limitation two, limitation three and limitation four.

5. Claims 8-9 and 23 are rejected under 35 U.S.C. 112, second paragraph, claims 8 and 23 recites the limitation "constituent elements" in line 1-2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-24 are rejected under 35 U.S.C. § 101, because none of the claims are directed to statutory subject matter. Independent claim 1 deals with simple abstract idea. A claim that recites a computer that solely calculates a mathematical formula or a computer disk that solely stores a mathematical formula is not directed to the type of statutory subject matter eligible for patent protection. The claims are not producing useful, concrete and tangible results. See *Diehr*, 450 U.S. at 186 and *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Yau (US Patent 6,741,688) hereinafter Yau.

10. As per independent claim 1, the only one drawing provided and does not fully relate to the claim. Yau teaches an electronic method for handling telephone calls includes a telephone number template. The template preferably is as wide as a telephone number is long and identifies one or more telephone number digits by the digit positions within a telephone number field for comparison purposes (col. 1, line 66 to col. 2, line 4). Yau teaches the claimed, associating a plurality of keys with a plurality of respective predetermined records in the database, wherein each key comprises a data string of one or more digits, associating each digit in the data string with a level as a function of the position of the digit in the data string, obtaining an instruction at a first level, wherein the instruction is associated with one or more records in the database and checking for another instruction at a second level, wherein the another instruction is associated with one or more records in the database; and if the another instruction is absent from the second level, returning to the first level and indexing the data string in

accordance with the instruction at the first level (Fig. 2, col. 3, line 57 to col. 4, line 36 and col. 4, lines 21-27).

11. As per dependent claim 2, Yau teaches the claimed, each of said keys represents a group of telephone numbers (Fig. 2, col.4, lines 5-7).

12. As per dependent claim 3, Yau teaches the claimed, each of said keys is a specified portion of each telephone number of said group (Fig. 2, col. 4, lines 37-38).

13. As per dependent claim 4, Yau teaches the claimed, said specified portion is a starting portion of said each telephone number of said group (Fig. 2, col. 4, lines 37-38).

14. As per dependent claim 5, wherein said starting portion comprises one or more digits (Fig. 2, col. 4, lines 37-38).

15. As per dependent claim 6, Yau teaches the claimed, records are call processing instructions (Fig. 2, col. 4, lines 5-5).

16. As per dependent claim 7, Yau teaches the claimed, call processing instructions are routing instructions (col. 2, lines 44-48).

17. As per dependent claim 8, Yau teaches the claimed, constituent elements are alphanumeric characters (Fig. 2, col. 4, lines 18-20).

18. As per dependent claim 9, Yau teaches the claimed, each of said keys represents a group of data entries of said database (Fig. 2, col. 3, lines 57-61 and col. 4, lines 30-33).

19. As per dependent claim 10, Yau teaches the claimed, each of said records is a destination assigned to said group represented by said each key (Fig. 2, col. 4, lines 21-23).

20. As per dependent claim 11, Yau teaches the claimed, a sequence of said plural levels corresponds to a sequence of said digits in said data strings (Fig. 2, col. 4, lines 23-27).

21. As per dependent claim 12, Yau teaches the claimed, sequence of the digits is a natural order of the digits in the data string (Fig. 2, col. 4, line 65-67).

22. As per dependent claim 13, Yau teaches the claimed, a first level represents a first digit, a second level represents a second digit, a third level represents a third digit, and so forth (Fig. 2, col. 5, lines 57-61).

23. As per dependent claim 14, Yau teaches the claimed, sequence of the digits is determined by a specified priority of each digit in the data string (Fig. 2, col. 6, lines 52-61).

24. As per dependent claim 15, Yau teaches the claimed, a first level represents a digit of a highest priority, a second level represents a digit of a secondly highest priority, a third level represents a digit of a thirdly highest priority, and so forth (Fig. 2, col. 5, lines 57-61).

25. As per dependent claim 16, Yau teaches the claimed, data string query comprising a string of constituent elements each taking one digit in the string, said method comprising the steps of: starting at a first level of said database, checking for an instruction for each said constituent element of said data string query at each digit represented by each level and moving on to check a next level until said instruction found at a lastly checked level does not include an sub-instruction of moving on to check a next level and if said instruction found at said lastly checked level specifies one or more records, returning said specified records to said data string query, otherwise backing up one level at a time until an instruction specifying one or more records is found, and returning said specified one or more records to said data string query. This claim is rejected under the same rationale as claim 1.



26. As per dependent claim 17, Yau teaches the claimed, data string query is a telephone number. This claim is rejected under the same rationale as claim 2.

27. As per dependent claim 18, Yau teaches the claimed, records are call processing instructions. This claim is rejected under the same rationale as claim 6.

28. As per dependent claim 19, Yau teaches the claimed, call processing instructions are routing instructions to route a call associated with said telephone number. This claim is rejected under the same rationale as claim 7.

29. As per dependent claim 20, Yau teaches the claimed, levels are checked in a sequence corresponding to a sequence of said digits in said data string query. This claim is rejected under the same rationale as claim 11.

30. As per dependent claim 21, Yau teaches the claimed, sequence of the digits is a natural order of the digits in the data string query. This claim is rejected under the same rationale as claim 12.

31. As per dependent claim 22, Yau teaches the claimed, sequence of the digits is determined by a specified priority of each digit in the data string query. This claim is rejected under the same rationale as claim 14.

32. As per dependent claim 23, Yau teaches the claimed, constituent elements of the data string query are alphanumeric characters. This claim is rejected under the same rationale as claim 8.

33. As per dependent claim 24, Yau teaches the claimed, implemented as a recursive algorithm computer program (Fig. 1, col. 8, lines 41-52).

34. As per independent claim 25, a method of looking up records for a data string query in a database indexed said data string query comprising a string of constituent elements each taking one digit in the string, said method comprising the steps of, starting at a first level of a multilevel data structure, checking for an instruction for each said constituent element of said data string at each digit represented by each level and moving on to check a next level until an instruction found at a last checked level does not include a sub-instruction to check a next level and if said instruction found at said last checked level specifies one or more records, returning said specified one or more records to said data string query, otherwise backing up one level at a time until a level with records to be returned is found and returning all routing records encountered in all levels in either the order encountered or in reverse order. This claim is rejected under the same rationale as claim 16.

35. As per dependent claim 26, Yau teaches the claimed, implemented as a recursive algorithm (Fig. 1, col. 8, lines 41-52).

***Response to Arguments***

36. Applicant's arguments filed on 11/3/2006 have been fully considered but they are not persuasive and details as follows:

a) Applicant's argument stated as "Claim 1 as amended recites, inter alia, 'A method for indexing a database.'"

In response to Applicant's argument, Examiner respectfully disagrees because merely amending the preamble will not overcome the U.S.C. 101 rejection. The whole claim has to be investigated and to amend accordingly to meet the requirement of the claim must be useful, concrete and tangible. So the claim 1 is still has the non-statutory matter.

b) Applicant's argument stated as "The Applicant contends that Yau does not describe all of the limitations of claim 1."

In response to Applicant's argument, Examiner respectfully disagrees because Yau teaches over all the same method used to call routing using pattern matching concept of digit by digit of the telephone number testing and the same is disclosed by the current application (Fig. 2, col. 3, line 57 to col. 4, line 36 and col. 4, lines 21-27). Further to Applicant's arguments, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish

the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

### ***Conclusion***

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2164

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sathyanarayan Pannala  
Primary Examiner

srp  
January 17, 2007